DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016720 Address: 333 Burma Road **Date Inspected:** 25-Aug-2010

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Tian Lei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

Subassembly, Bay 04, 14E, Bottom Panel.

SAW welding of weld joint BP3082-001-037; located at subassembly, Bay 04, 14E. Welder is identified as 058100; ZPMC Quality Control Inspector (QC) is identified as Tian Lei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2221-B-L2C-S-2.

Subassembly, Bay 04, 13CW, Deck panel to U-rib.

During Random Visual in process Inspection, this QA inspector observed ZPMC personnel carrying out Weld repairs after visual testing on Deck panel to U-rib welds of Deck Panel DP3151-001. Repair carried out with Flux core arc welding (FCAW). Welder is identified as 203805; ZPMC Quality Control Inspector (QC) is identified as Yang Bai Qian. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-FCM-REPAIR.

Welds & Approximate Y-locations of repair were;

W002 - 4250mm.

W139 - 4850mm.

Subassembly, Bay 04, Traveler rail Bracket.

FCAW Repair welding of weld joint TR5C-PP085-005(WRR# B-WR14678); located at subassembly, Bay 04.

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Welder is identified as 052696; ZPMC Quality Control Inspector (QC) is identified as Shen Jian Guo. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-REPAIR-1.

This QA Inspector carried out NDE on following Subassembly, Bay 04, Traveler rails.

This QA inspector performs Random Visual Testing (VT) & random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 06480). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

- 1) 11TR1-012.
- 2) 11TR1-006.
- 3) 10TR3-028.
- 4) 11TR3-001.
- 5) 10TR1-019
- 6) 10TR3-029.
- 7) 11TR2-003.
- 8) 10TR1-029.
- 9) 11TR2-001.
- 10)11TR3-014.

Subassembly, Bay 04, Traveler rails.

This QA inspector performs Random Ultrasonic Testing (UT) of approximately 10% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 06480). This QA Inspector generated an UT report(TL-6027) for this date. The members are identified as

- 1) 11TR3-001.
- 2) 11TR2-003.
- 3) 10TR1-029.
- 4) 11TR2-001.
- 5) 11TR3-014.

Subassembly, Bay 04, U-Rib to Deck Plate welds.

This QA inspector performs Random Visual Testing (VT) & random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 06484). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

- 1) DP3092(PL3188A)-001; Green tag # 14281.
- 2) DP3092(PL3188B)-001; Green tag # 14282.
- 3) DP3102(PL3198A)-001; Green tag # 14283.
- 4) DP3135(PL3198B)-001; Green tag # 14284.
- 5) DP3135(PL3198C)-001; Green tag # 14285.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 1500.042.2372, who represents the Office of Structural Materials for your project.

Inspected By:	Juvekar,Amit	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer